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Sequencing of the 8F4-29 kDa sample revealed, besides fragments of known proteins, a peptide sequence XRLTDVT (SEQ ID NO:5) for which no human correlate was found in any of the protein databases.

IN THE CLAIMS:

Please amend the claims as follows:

Replace claims 71, 76, 78, 83, 85, 86 and 89-97 with the following amended claims:

F2
Sub
98

71. (Twice amended) A monoclonal antibody that recognizes a human 8F4 polypeptide or a fragment thereof, wherein said 8F4 polypeptide:

- a) is an inducible T cell costimulatory molecule;
- b) occurs on two-signal-activated human T lymphocytes;
- c) exhibits a molecular weight of about 55 to 60 kilodaltons as determined by non-reducing sodium dodecyl sulphate polyacrylamide gel electrophoresis (SDS-PAGE); and
- d) is a dimer of two peptide chains exhibiting molecular weights of about 27 kilodaltons and 29 kilodaltons, as measured by reducing SDS-PAGE,

wherein the human 8F4 polypeptide is recognized by the antibody deposited with the Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH ("DSMZ") and assigned accession no. DSM ACC2539;

and wherein the monoclonal antibody, in conjunction with anti-CD3 monoclonal antibody OKT3, costimulates human T lymphocytes.

F3
Sub
99

76. (Twice amended) A monoclonal antibody that recognizes a human 8F4 polypeptide or a fragment thereof, wherein said 8F4 polypeptide:

- a) is an inducible T cell costimulatory molecule;
- b) occurs on two-signal-activated human T lymphocytes;
- c) exhibits a molecular weight of about 55 to 60 kilodaltons as determined by non-reducing sodium dodecyl sulphate polyacrylamide gel electrophoresis (SDS-PAGE); and
- d) is a dimer of two peptide chains exhibiting molecular weights of about 27 kilodaltons and 29 kilodaltons, as measured by reducing SDS-PAGE,

Sub 9a)
F3

wherein the human 8F4 polypeptide is recognized by the antibody deposited with the DSMZ and assigned accession no. DSM ACC2539;

and wherein the monoclonal antibody inhibits a biological activity of the human 8F4 polypeptide.

78. (Twice amended) A hybridoma that produces a monoclonal antibody that recognizes a human 8F4 polypeptide or a fragment thereof, wherein said 8F4 polypeptide:

- F4
- Sub 910
- a) is an inducible T cell costimulatory molecule;
 - b) occurs on two-signal-activated human T lymphocytes;
 - c) exhibits a molecular weight of about 55 to 60 kilodaltons as determined by non-reducing sodium dodecyl sulphate polyacrylamide gel electrophoresis (SDS-PAGE); and
 - d) is a dimer of two peptide chains exhibiting molecular weights of about 27 kilodaltons and 29 kilodaltons, as measured by reducing SDS-PAGE,

wherein the human 8F4 polypeptide is recognized by the antibody deposited with the DSMZ and assigned accession no. DSM ACC2539;

and wherein the monoclonal antibody, in conjunction with anti-CD3 monoclonal antibody OKT3, costimulates human T lymphocytes.

83. (Twice amended) A hybridoma that produces a monoclonal antibody that recognizes a human 8F4 polypeptide or a fragment thereof, wherein said 8F4 polypeptide:

- F5
- Sub 911
- a) is an inducible T cell costimulatory molecule;
 - b) occurs on two-signal-activated human T lymphocytes;
 - c) exhibits a molecular weight of about 55 to 60 kilodaltons as determined by non-reducing sodium dodecyl sulphate polyacrylamide gel electrophoresis (SDS-PAGE); and
 - d) is a dimer of two peptide chains exhibiting molecular weights of about 27 kilodaltons and 29 kilodaltons, as measured by reducing SDS-PAGE,

wherein the human 8F4 polypeptide is recognized by the antibody deposited with the DSMZ and assigned accession no. DSM ACC2539;

Sub 911 (F3)
and wherein the monoclonal antibody inhibits a biological activity of the human 8F4 polypeptide.

85. (Twice amended) A pharmaceutical composition comprising a monoclonal antibody that recognizes a human 8F4 polypeptide or a fragment thereof, wherein said 8F4 polypeptide:

- EG
Sub 912
- a) is an inducible T cell costimulatory molecule;
 - b) occurs on two-signal-activated human T lymphocytes;
 - c) exhibits a molecular weight of about 55 to 60 kilodaltons as determined by non-reducing sodium dodecyl sulphate polyacrylamide gel electrophoresis (SDS-PAGE); and

d) is a dimer of two peptide chains exhibiting molecular weights of about 27 kilodaltons and 29 kilodaltons, as measured by reducing SDS-PAGE, wherein the human 8F4 polypeptide is recognized by the antibody deposited with the DSMZ and assigned accession no. DSM ACC2539;

and wherein the monoclonal antibody, in conjunction with anti-CD3 monoclonal antibody OKT3, costimulates human T lymphocytes.

86. (Twice amended) A pharmaceutical composition comprising a monoclonal antibody that recognizes a human 8F4 polypeptide or a fragment thereof, wherein said 8F4 polypeptide:

- F3
Sub 913
- a) is an inducible T cell costimulatory molecule;
 - b) occurs on two-signal-activated human T lymphocytes;
 - c) exhibits a molecular weight of about 55 to 60 kilodaltons as determined by non-reducing sodium dodecyl sulphate polyacrylamide gel electrophoresis (SDS-PAGE); and

d) is a dimer of two peptide chains exhibiting molecular weights of about 27 kilodaltons and 29 kilodaltons, as measured by reducing SDS-PAGE, wherein the human 8F4 polypeptide is recognized by the antibody deposited with the DSMZ and assigned accession no. DSM ACC2539;

8F4 sub 9.3 and wherein the monoclonal antibody inhibits a biological activity of the human 8F4 polypeptide.

89. (Amended) The monoclonal antibody of Claim 71 or 76, wherein said monoclonal antibody recognizes the human 8F4 polypeptide of about 55 kilodaltons to 60 kilodaltons, as determined by non-reducing SDS-PAGE.

90. (Amended) The monoclonal antibody of Claim 71 or 76, wherein said monoclonal antibody recognizes the peptide chain of about 27 kilodaltons, as determined by reducing SDS-PAGE.

91. (Amended) The monoclonal antibody of Claim 71 or 76, wherein said monoclonal antibody recognizes the peptide chain of about 29 kilodaltons, as determined by reducing SDS-PAGE.

F8 cont 92. (Amended) The monoclonal antibody of Claim 71 or 76, wherein said monoclonal antibody recognizes a human 8F4 polypeptide present on activated human CD4⁺ T lymphocytes and activated human CD8⁺ T lymphocytes.

93. (Amended) The hybridoma of Claim 78 or 83, wherein said hybridoma produces a monoclonal antibody that recognizes the human 8F4 polypeptide of about 55 kilodaltons to 60 kilodaltons, as determined by non-reducing SDS-PAGE.

94. (Amended) The hybridoma of Claim 78 or 83, wherein said hybridoma produces a monoclonal antibody that recognizes the peptide chain of about 27 kilodaltons, as determined by reducing SDS-PAGE.

95. (Amended) The hybridoma of Claim 78 or 83, wherein said hybridoma produces a monoclonal antibody that recognizes the peptide chain of about 29 kilodaltons, as determined by reducing SDS-PAGE.